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SWAZILAND



ANNUAL MEDICAL AND SANITARY REPORT

FOR THE YEAR, 1968

S W A Z I L A N D

ANNUAL MEDICAL AND SANITARY REPORT

1968



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INTRODUCTION

Swaziland has an area of 6,704 square miles and is bordered on the north, west and south by the Transvaal, and on the east by Mocambique and Zululand.

The Territory is geographically divided into four well defined regions, running from north to south, namely the mountainous highveld in the west with an altitude of 3,500 to 5,000 feet, the middleveld with an average altitude of 2,000 feet; and the lowveld or bushveld with an altitude of 1,000 to 300 feet; and the Lubombo Plateau on the east, with an altitude of 2,000 feet. Scenically the Territory is one of the more attractive parts of Africa. The highveld has a temperate climate and frosts occur during winter. The climate of the middleveld is subtropical, although every few years a frost does occur.

Rainfall, which occurs chiefly in the summer, varies between approximately 30" and 50" a year. Drizzle and mists are frequent in the highveld areas. The country is well watered by numerous perennial streams and rivers, some of which are of a considerable size and now provide water for three large irrigation schemes, which have been established at Mhlume in the north-east, at Big Bend in the east (at both of which sugar is grown) and at Malkerns in the centre of Swaziland (which produces rice, sub-tropical fruit and citrus).

In addition to the irrigation schemes, other important agricultural activities are cattle ranching and seed cotton production in the bushveld and sub-tropical fruit, maize and rice production in the middleveld, in the southern portion of which a considerable amount of tobacco is also grown. In the mining field, Havelock Mine in the north-west is a most important producer of asbestos, and with the opening of the railway in November, 1964 connecting Swaziland with Lourenco Marques, the mining of iron ore at Ngwenya and of coal at Mpaka got underway. A pulp mill and a sawmill are operating at two of the forestry concerns in the highveld. Cotton ginnery, meat canning factory and a brewery now operate at Matsapa Industrial Area.

A census of the total population was held in May, 1966. This was the first census of all the people in Swaziland.

The figures are as follows:-

African	362,367
Europeans	7,987
Other Non Africans	4,217
	<hr/>
	374,571
	<hr/>

One half of the area of the Territory is in communal ownership of the Swazi Nation and the remainder owned by individual tenure farmers. The Swazi have the exclusive use of the communal tenure areas and the remainder is open to farmers of all races without discrimination. Swazi dwellings for the most part consist of wattle-and-daub structures, or bee-hive huts, and small family collections of these huts are widely dispersed. Other than in the neighbourhood of the larger towns, there are no villages. Whilst the agricultural activities of the Swazi are still, in the main, concentrated on the raising of cattle and goats and the cultivation of maize, the work of the Agricultural Department is now producing results, and both the standard and scope of Swazi farming are improving year by year.

The/.....

The following hospitals exist:-

A. Run by Government:

Mbabane	175 beds
Hlatikulu	163 beds
Pigg's Peak	50 beds
Mankaiana	33 beds
Matsapa (Tuberculosis)	200 beds
Goedgegun	12 beds
	<hr/>
	633
Mental	200

B. Run by Missions:

Raleigh Fitkin Memorial,	322
Manzini	
Good Shepherd, Stegi	67

C. Run by Industry:

Havelock Mine Hospital	65
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D. Run Privately:

St. Michael's Clinic	26
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TOTAL 1,313

Apart from these formal hospitals there are dispensaries or clinics run by industrial concerns which can accommodate up to about 20 patients each.

The rural areas are catered for by 45 clinics staffed by trained nurses, 27 of them being conducted by Missions and 18 by Government.

The Save the Children Fund Mobile Clinic came to an end in July, 1968 and Dr. Kimmance returned to the U.K. The hiatus left by the withdrawal of the Clinic in the Shiselweni District was acutely felt by all people. Fortunately OXFAM offered assistance in the form of money for the erection of three static clinics at places where the Mobile Clinic had operated. OXFAM also recruited a Medical Officer from the U.K. to service all clinics in the South and in addition purchased a vehicle for the doctor. The OXFAM doctor, Dr. Peter Moss, commenced duties in November.

There were 50 doctors, of whom 12 were licensed medical practitioners, 2 dental surgeons in the Territory in 1968. 2 of the doctors were not in practice. Of the 48 practicing doctors, 17 were concerned with Government medicine, 9 with Mission work, 9 with Industrial Medicine, 12 in private practice and 1 doctor was concerned with Save the Children Fund and later OXFAM.

The Mbuluzi Leper Hospital, situated 10 miles from Mbabane and run by the Nazarene Mission, with the assistance of a Government grant, copes most adequately with the small number of lepers in the Territory.

The British Red Cross Society is now running Infant Welfare Clinics at Mbabane, Hlatikulu, Stegi, Pigg's Peak, Manzini, Kwaluseni, Mhlambanyati and Goedgegun at which most useful work is being done. The Save the Children Fund has started a school feeding scheme.

The Public Health Services of the Territory are centred at the Health Office in Manzini for the control of Malaria and Bilharzia and at Mbabane which controls environmental health, Health Education and a Public Health Nursing Unit. There is a Pathology Laboratory at which routine serological, biochemical bacteriological and haematological investigations are carried out.

The Medical Association of Swaziland whose members include private practitioners, medical missionaries and Government medical officers, hold quarterly meetings, which are well supported and which make up to some extent for the lack of professional contact so common in territories such as Swaziland.

The training of nurses in Swaziland is carried out at the Ainsworth Dickson Training College attached to the Raleigh Fitkin Memorial Hospital, Manzini where training for the High Commission Territories Nursing Council qualifications in General Nursing, lasting four years, and in Midwifery, lasting one year, is given. The Ainsworth Dickson Training College can at present train sufficient nurses for the needs of Swaziland. Dispensers are trained at Government Hospitals as required. Laboratory Assistants are trained at the T.B. Centre W.H.O. Laboratory by a W.H.O. Technician. This laboratory does Public Health work as well as the T.B. laboratory investigation for the whole Territory.

CHAPTER 1

REVIEW OF THE YEAR'S WORK

The Hon. Minister Dr. Allen Nxumalo who was appointed Minister of Health in 1967 became the first Minister of Health in an Independent Swaziland.

2. STAFF:

Dr. Charles Runciman retired as Permanent Secretary/Director of Medical Services on 16th September, 1968 and at Independence on 6th September, 1968 Dr. Fanny Friedman was appointed Permanent Secretary and Dr. Jack Kloppe was appointed Director of Medical Services. Dr. S. P. N. Shongwe was appointed Senior Medical Officer and Dr. G. G. Murphy Senior Medical Officer of Health.

A number of Medical Officer contracts expired during the year. Drs. Hawthorne, Compton, Farrell and O'Connor left the country and Dr. Kimmance of Save the Children Fund left for the U.K. to further his studies. At the end of the year five vacancies existed for Medical Officers.

Dr. Ellen Blekie and Dr. Hague-Moss were recruited to the service and Dr. Jennifer James an International Voluntary Service volunteer arrived in October, 1968.

The supply of trained nurses continued to exceed the demand but an additional thirty nurses were recruited to the nursing establishment during the past year.

Sisters Masipa, Mabuza and Mtetwa were promoted to Matrons Grade II and were stationed at Pigg's Peak, Mankaiana and T.B. Hospital respectively. Five Staff Nurses were promoted to Sisters. Matron Mdiniso was promoted to Matron Grade I.

The nursing services are 100% localised and indeed in pursuance with Government policy the total establishment of the Ministry of Health is 95% localised.

The 30 expatriates still employed in the Ministry are mainly Medical Officers.

Three International Voluntary Service volunteers were recruited during the year. They are:-

Miss Josephine Hooper	-	Laboratory Technician.
Miss Susan Evans	-	Physiotherapist.
Miss Jennifer James	-	Medical Officer.

Dr. Peter Moss, the OXFAM Doctor, arrived in November, 1968 to service all clinics in the South of Swaziland and to fill the gap caused by the withdrawal of the Save the Children Fund Mobile Clinic.

3. HOSPITALS AND CLINICS:

The Out-Patient Department at Mbabane Hospital was officially opened by the Minister of Health in March. The new building together with large waiting room was a vast improvement on the old congested Out-Patient Department.

Work on the second storey at Mbabane Hospital progressed satisfactorily thus giving the whole hospital a facelift. The additional four wards should provide another 145 beds and should be completed in 1969.

Work/.....

Work was also commenced on a new staff dining-room and kitchen for the hospital.

The childrens wards were transferred to the convalescent section thereby giving much needed space for overcrowded sick children.

A renovated isolation block at Hlatikulu Hospital was completed and became ready for occupation thereby relieving much of the congestion and difficulties in treatment of infectious fevers in the children's wards.

Some minor alterations were made at Mankaiana Hospital in the children's and maternity wards.

The Save the Children Fund Mobile Clinic ceased functioning in the Shiselweni District during the year thus leaving a hiatus in Southern Swaziland which could not be filled by the existing and over extended Government medical services.

Three new clinics were erected at Lobamba, Mangcongco and Gollel. The old structure at Vimy Ridge which was used for many years and only operated once a fortnight was closed when the new clinic was opened at Gollel. Full time Staff Nurses were posted to these three clinics.

A Panel of Visiting Specialists from South Africa was created. A number of Specialists from the U.K. and elsewhere have visited Swaziland in the past for short periods.

The Specialists visit Mbabane Hospital mainly, at regular intervals on a Pro Deo basis. They perform major operations, advise incumbent staff and help to raise the standards of medical care generally. Teaching programmes for Nurses have also been introduced. The Specialist panel consist of a Radiologist, Pathologist, Gynaecologist, Urologist, Thoracic Surgeon, E.N.T. Surgeon, Orthopaedic Surgeon, Paediatrician, Plastic Surgeon, Anaesthetist, General Surgeon, Dermatologist and Psychiatrist.

A number of medical students from Stellenbosch University visited Swaziland and worked in the bigger hospitals during their vacations, also on a voluntary basis. Their presence relieved the hard pressed medical staff of some of their burdens and the students were welcome.

A S.C.A.A.P. Officer was sent to Swaziland to train local personnel in hospital administration and to introduce a uniform system of administration within the hospitals and institutions of the Ministry of Health.

In Government Hospitals the total admissions rose by some 10% as compared to 1967. The number of operations performed and X-rays taken rose considerably. The number of out-patient attendances at Government Hospitals and Government Clinics throughout the country continued to show a decline. This may be due to the increase in the number of general practitioners practicing in the towns and the tendency for people to seek private attention thereby obviating sitting in a long queue waiting for medical attention. The average daily number of in-patients very nearly doubled as a result of the full use made of the T.B. Hospital and the opening of the Mental Hospital at Matsapa.

Maternity and Child Welfare services showed substantial increases in most districts, brought about mainly by the Public Health Nursing Units in Mbabane, Manzini and Hlatikulu. The services provided by the Public Health Nursing Units also accounted for the drop

in/.....

in out-patient attendances in hospitals thereby relieving much of the pressure at busy Out-Patient Departments. The work of the Nursing Unit was further reflected in the increase in the number of confinements done in the hospitals.

The total expenditure of the Ministry rose to approximately R900,000, which represents some 6% of the total budget of the country.

4. SIGNIFICANT DISEASES:

Tuberculosis - the work of the T.B. Control Centre progressed well, particularly the BCG/Smallpox inoculation campaign which has completed visiting most of the schools in the Manzini District. The campaign is estimated to have vaccinated about 62% of children between the ages of 0 - 15 years.

Malaria - a considerable drop in the number of reported cases as compared to last year. Again, most of the positive cases were found in immigrants, mainly from Mocambique. The low incidence was doubtless due to the lower than average rainfall and the intensified spraying of last year following the high incidence.

Malnutrition - there was a rise in the number of cases of malnutrition and kwashiorkor doubtless influenced by the lower than average rainfall for the year.

Other Infectious Diseases -- Measles and Whooping Cough showed a considerable increase in the number of cases over previous years. Typhoid, Smallpox, Venereal Diseases and Bilharzia all remained fairly constant.

5. POST GRADUATE COURSES - 1968:

Dr. Friedman - Health Planning in Latin America.

Dr. Kaplan - Diploma in T.B. and Chest Diseases in the U.K.

Matron A. C. T. Mabuza - International Hospital Training Course in the U.K.

Sister Khanyile - Radiography in the U.K.

Sister Masipa - Ward Administration in South Africa.

Staff Nurse Linah Khumalo - T.B. Nursing Care in the U.K.

OFFICIAL VISITORS - 1968

Lord Acton - Director, Swaziland Red Cross.

Dr. Delfini - Malariologist, W.H.O.

Mr. Sobti - Entomologist, W.H.O.

Dr. Browne - Leprologist, Adviser to Ministry of Health, U.K.

Dr. Roberts - W.H.O. Representative, Zambia.

Dr. Paul Keen - National Cancer Survey, South Africa.

Mr. Clark - Royal Commonwealth Society for the Blind, U.K.

Mr. Harris - Regional Director for Oxfam, Lesotho.

Dr. Connihan - Chief Medical Officer, Anglo-American Corporation, South Africa.

Mr. Rolleston - Peace Corps, U.S.A.

Mr. Manley - Secretary General, International Voluntary Services.

Dr. George Cohen - Radiologist and initiator of Panel of Visiting Specialists, Mines Benefit Society, South Africa.

Dr. Urie Chassis - Director, University Medical Centre, Jerusalem.

Mrs. Pickard - Nursing Adviser to International Council for Nurses, Geneva.

Dr. Ladnyi - Inter-Country Smallpox Advisor, W.H.O.

CHAPTER II

COMMUNICABLE DISEASES:

1. TUBERCULOSIS: ANNUAL REPORT, 1968.

GENERAL:

Work at the TB Centre and anti-tuberculosis activities performed by the peripheral health centres continued to proceed, as a whole, satisfactorily, and the tendency towards integration of the TB project with the general health services continued to gather momentum.

Continuous efforts were made during the year in order to strengthen contact and co-operation between the TB Centre and the periphery dangerously relaxed in 1967 as a result of the transfers of staff that occurred within the TB Centre in 1966.

However, in spite of these efforts, the negative repercussions on the quantity, if not quality, of work at the peripheral level caused by these transfers continued to be felt all during the year. Thus, for the first time, the total number of diagnostic sputum specimens collected from patients attending peripheral health centres, not only did not increase, but presented a notable diminution while no significant changes occurred in the number of specimens collected from patients who attended the TB Centre. If need be, this points out once more that a stable staff is a sine qua non for any further development and that any protracted loss of contact between the TB Centre and the periphery carries with it stagnation and regression of vital activities. It is, therefore, the more regrettable that financial difficulties made it impossible to start, as planned a refresher course for the nurses in charge of peripheral health centres, that, inter alia, would have greatly helped to improve maintaining contact and increase the co-operation of such staff.

One other negative aspect of the work performed in 1968 was located at the TB Centre itself when it once more appeared that too much time and efforts were still dedicated to patients attending the TB Centre and to those hospitalised at Matsapa TB Hospital at the expense of more important, under the present epidemiological situation, public health activities aiming at maintaining the pace of progress and development of the National Tuberculosis Programme as a whole. By the end of the year, however, steps were taken to remedy such a situation and country-wide scale field activities of the TB Centre staff were drastically increased.

While diagnostic and curative activities remained stationary as a whole, great progress was achieved in the prevention field. The mass combined BCG and Smallpox campaign was completed in Manzini district and realistic and satisfactory results were attained.

Two other main features marked the year; (i) the complete transformation of the specialized TB Centre's laboratory into the country's Central Public Health Laboratory, and (ii) the start by the WHO Epidemiological Centre in Nairobi of the evaluation procedure of some of the results achieved by the TB project.

To summarise, the year 1968 has been a critical one inasmuch as it has pointed out some of the dangers that loom over the National Tuberculosis Programme, and demonstrated that the Programme will not progress and develop as planned unless:

- (i) continuous contacts are maintained between the TB Centre and the periphery;
- (ii) the TB Centre is staffed by a stable personnel;
- (iii) the activities of the TB Centre are concentrated on the public health aspects of the Programme;

all points that should be continuously kept in mind unless the National Tuberculosis Programme becomes a stagnant venture.

TABLE/.....

YEARLY SUMMARY FOR TB CONTROL 1968

Test Area - Population 98,500
 No. Agencies 19
 Other Areas - Population 268,000
 No. Agencies 36

MANZINI DISTRICT: OTHER DISTRICTS: WHOLE COUNTRY:
 (test area)

<u>CASE FINDING:</u>			
Smears	4659*	3374*	8033*
Primary Cultures read	4487*	3383*	8270*
X-Ray films	3459	928	4387
Cases, microscopy only	276	330	606
Cases, culture only	116	138	254
Suspects with X-Ray cavity	88	32	120
Suspects without X-R cavity	229	400	628
<u>TREATMENT:</u>			
End previous year	871	602	1473
Started	532	478	1010
Resumed or transferred in	261	564	825
Interrupted, died or transferred out	973	933	1906
Completed	47	84	131
End present year	644	627	1271
<u>FOLLOW-UP:</u>			
Defaults	1806	1707	3513
Home visits to defaulters	1193	671	1864
Other measures to defaulters	907	2147	3054
Smears	2020	2013	4033
Cultures	1969	2166	4135
X-Ray films	1473	525	1998
Sensitivity tests primary and follow-up	763	699	1462
Supervisory visits to peripheral health centres	95	180	275
<u>OTHER ACTIVITIES:</u>			
Group X-Ray examinations	2390	483	2873
Nurses completed training	-	-	-
Lab. workers completed training	1	-	1

* figures represent number of patients examined.

TABLE 2.

BACTERIOLOGICAL EXAMINATIONS PERFORMED BY DIRECT MICROSCOPY AND CULTURE 1955 - 66 - 67 - 68.

No. of exams and results:	Origin of patients and year of examination:												Total from 1965 to 1968:		
	TB Centre:				Other Centres:				Whole Country:				TB Centre:	Other Centres:	Whole Country:
No. Bact. Exams.	1965	1966	1967	1968	1965	1966	1967	1968	1965	1966	1967	1968			
	2145	2617	2689	2730	2975	4347	6636	5303	5120	6964	9352	8033	10181	19261	29442
No. Positive	181	213	182	216	537	534	702	644	718	735	891	860	792	2424	3216
% Positive	8.4	8.1	6.8	7.9	18.1	12.2	10.9	12.1	14	10.8	9.6	10.7	7.8	12.6	10.9

CASE YIELD BY DIRECT MICROSCOPY BY DISTRICT AND BY TYPE OF HEALTH CENTRE FOR PERIOD JANUARY - DECEMBER, 1968.

DISTRICT	TYPE OF CENTRE	NO. CENTRES OPERATING 1968	OPERATING CENTRES X MONTHS	NO. EXAMINED	NO. POSITIVE	PER CENTRE MONTH EXAM: : POS:	POSITIVE RATE
MANZINI (Test Area)	TB CENTRE	1	12	2730	157	228 : 13.1	5.8
	HOSPITAL	1	12	550	58	45.8 : 4.8	10.5
	RURAL CLINIC	17	204	1379	61	6.8 : 0.3	4.4
Total		19	228	4659	276	20.4 : 1.2	5.9
HHOHHO	HOSPITAL	3	36	1105	96	30.7 : 2.7	8.7
	RURAL CLINIC	9	108	309	32	2.9 : 0.3	10.3
Total		12	144	1414	128	9.8 : 0.9	9
SHISHEL-WENI	HOSPITAL	2	24	635	82	28.5 : 3.4	12
	RURAL CLINIC	9	108	858	62	7.9 : 0.6	7.2
Total		11	132	1543	144	11.7 : 1.1	9.3
LUBOMBO	HOSPITAL	1	12	60	12	5.1 : 1	19.7
	RURAL CLINIC	12	144	356	46	2.5 : 0.3	12.9
Total		13	156	417	58	2.7 : 0.4	1.4
TOTAL WHOLE COUNTRY	ALL TYPES	55	660	8033	606	12.2 : 0.9	7.5

- NOTES: 1) All direct microscopies were performed at the TB Centre.
- 2) Number examined at the TB Centre (2730) refers to persons who presented themselves for examination of their own accord.
- 3) Number examined at other centres refers to sputum specimens forwarded for examination to the TB Centre and to persons referred, the total number of which was 693 with 73 positive on direct microscopy.

TABLE 4.

BCG/SP SCHOOL VACCINATION CAMPAIGN: BCG.

Period	Eligible *			BCG vaccinated:			BCG coverage %			Working Days **
	0-4	5-14	0-14	0-4	5-14	0-14	0-4	5-14	0-14	
18.9.1967 to 29.11.1968	16850	28428	45278	7757	21929	29686	46	77.1	65.5	225

NOTES: * From 1966 complete census.
** Working days correspond to school days.

TABLE 5.

BCG/SP SCHOOL VACCINATION CAMPAIGN: SMALLPOX.

Period	Eligible*			Primary Vacc:			Revaccinations			Tot. Vacc. and % Cover in ()
	0-4	5-14	15+	0-4	5-14	15+	0-4	5-14	15+	
18.9.1967 to 21.11.1968	16850	28428	51737	5732	9338	953	1722	11962	5164	35371 (36.5)

NOTES: * From 1966 complete census.
Working days as for BCG vaccinations.

TABLE 6.

TB REGISTER END 1968.

		TEST AREA*		OTHER AREAS	**	WHOLE COUNTRY.
		TB CENT.	OTH.CENT.			
Under treatment at end of year	Cases	36	324	594		954
	Suspects	153	122	32		307
	Contacts	6	3	1		10
	Total:	195	449	627		1271
Indexed at end of year	Cases	935	683	1497		3115
	Suspects	1393	512	1431		3336
	Contacts	158	92	25		275
	Total	2486	1281	2953		6726

NOTES: CASE indicates a patient suffering from bacteriologically confirmed pulmonary tuberculosis.
SUSPECT indicates a possible sufferer from pulmonary tuberculosis in whom the disease has not been bacteriologically confirmed.
* Manzini District.
** Other Districts.

ANNUAL MALARIA REPORT
JULY, 1967 - JUNE, 1968

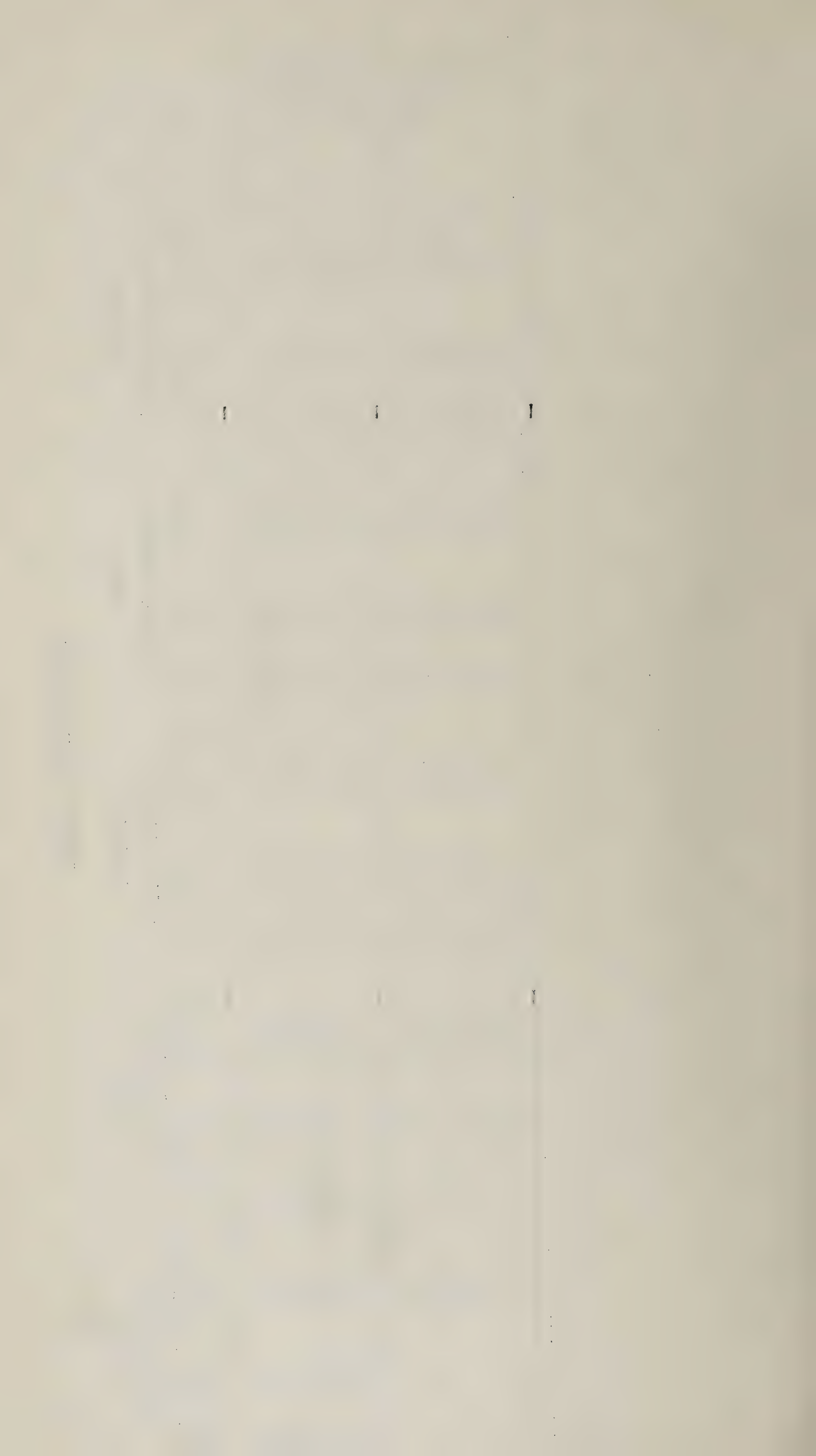
1. CLIMATIC CONDITIONS:

This year no excessively heavy rains occurred such as favoured widespread breeding of *A.gambiae* during the previous two years.

The meteorological records from various stations are reflected in the following table:-

METEOROLOGICAL REPORT

Month	<u>MANZINI</u>			<u>STEGI</u>			<u>BIG BEND</u>			<u>MHILUME</u>			<u>GOLLEL</u>		
	Altitude 2,000 ft.	Rainfall in ins.	Temp. °F Max. Min.	Altitude 2,200 ft.	Rainfall in ins.	Temp. °F Max. Min.	Altitude 500 ft.	Rainfall in ins.	Temp. °F Max. Min.	Altitude 950 ft.	Rainfall in ins.	Temp. °F Max. Min.	Altitude 600 ft.	Rainfall in ins.	Temp. °F Max. Min.
July, 1967	0.69	80.6	36.5	0.43	80.6	39.6	1.09	74.5	40.5	0.17	88	40	0.51	94.1	41
August	Nil	85.1	39.2	0.08	91.8	41.4	Nil	79.5	47.5	0.18	90	41	Nil	95	49.1
September	0.19	92.3	40.1	0.20	86.4	41	0.03	84.0	54.9	0.02	95	40	1.10	98.6	46.4
October	3.27	97.7	50	2.44	98.6	45	1.85	84.2	63	2.19	100	55	1.28	110.1	56.3
November	2.39	93.2	50.9	4.49	91.4	48.2	4.17	87.6	65.5	3.58	97	54	0.67	104.9	59.9
December	2.24	99.5	51.8	1.56	92.1	48.2	0.69	89.4	66.2	0.66	97	52	0.98	100.7	65.3
January, 1968	2.40	93.2	57.2	2.87	95.4	55	0.18	100.4	54.5	1.96	101	59	1.14		
February	1.52	97.9	51.8	4.02	95.9	47.3	3.50	101.1	56.1	5.31	97	60	1.12		
March	10.34	86	53.6	8.96	90.0	50	4.83	91.4	54.1	5.07	90	54	0.66		
April	2.99	86	48.2	2.22	84.2	48.2	1.80	90.1	42.3	1.60	92	49	0.71		
May	0.22	86.9	45.5	0.65	84.6	50.4	0.70	88.2	41.9	0.33	90	42	Nil		
June	0.37	81.5	37.4	0.37	80.6	39.2	0.19	87.4	25.7	0.68	87	37	Nil		



2. MEETINGS:

At the Annual Staff Meeting held at Manzini during the first week of August individual problems were discussed and the staff were informed of their duties for the new Malaria season.

3. ADDITIONAL STAFF:

1 Driver and 2 Mosquito Catchers were employed on a semi-permanent basis and 2 Drivers, 1 Mosquito Catcher, 2 Microscopists and 22 Spraymen were temporarily employed.

4. POPULATION AND HUT COUNTS:

These were carried out by the staff but more complete population figures were abstracted from the maps and reports of the official May, 1966 Census made available by the Census Commissioner and are as follows:-

Maintenance Phase:	107,019
Consolidation Phase:	81,440
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TOTAL:	188,459
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5. MALARIOUS AREAS:

The Northern portion of the Hhohho District and the Southern portion of the Shiselweni District have now been included in the Maintenance Area as no indigenous cases have occurred in these areas for at least three years.

6. MALARIA CONTROL MEASURES:

- (a) RESIDUAL SPRAYING with 75% D.D.T. Wettable Powder was carried out as follows:-

38,275 Huts sprayed
15,479.4 lbs. D.D.T. used =
2.4 Huts per lb. of D.D.T.

- (b) DRUG PROPHYLAXIS was instituted as follows:-

European farms at Nsoko;
Ministry of Agriculture teams working
in Bushveld areas, such as Mboma and
Mpolonjeni.

- (c) SURVEILLANCE OPERATIONS were continued by the field staff who were concerned mainly with routine blood taking and space spraying.

7. PARASITOLOGY:

Blood slides taken during the year were examined at the Health Office, Manzini by five Microscopists and the following results were recorded:-

<u>Source</u>	<u>Negative</u>	<u>Positive</u>	<u>Total</u>	<u>Species</u>
Indigenous	27,017	78	27,093	
Immigrants	2,824	63	2,887	
Cryptic	-	6	-	
Combined	29,841	147	29,980	
				Plasmodium falciparum: 133
				Plasmodium malariae: 4
				Plasmodium falcip./mal: 10

Annual Parasite Incidence: 0.45

Annual Blood Examination Rate: 15.9

Immigrants originated from the following sources:-

<u>Source</u>	<u>Negative</u>	<u>Positive</u>	<u>Total</u>	<u>% Positive</u>
Mocambique	1,092	53	1,145	4.6
Zululand	1,115	2	1,117	0.2
Transvaal	596	6	602	1.0
Other	21	2	23	8.8
	2,824	63	2,887	2.2

8. ENTOMOLOGY:

(a) HUT SPACE SPRAYING: The results of this work carried out by the field staff were as follows:-

No. of huts tested: 18,825
 No. of A.gambiae found: 24
 No. of A.funestus group found: 38
 No. of other Anophelines found: 52 as follows:-

15 A.rufipes
 13 A.marshalli
 12 A.pretoriensis
 3 A.coustani
 3 A.demeilloni
 2 A.listeri
 2 A.cinersos
 1 A.natalensis
 1 A.pharoensis.

(b) LARVAL SEARCHING: A small amount of larval searching revealed as follows:-

3 A.funestus types from Gundwini.
 1 " " " Mpofu.
 10 " " " Embhikwakhe.
 1 " " " Emahlabane.
 1 A.rivolorum.
 12 A.coustani.
 7 A.pretoriensis.
 1 A.rufipes.

(c) HAND CATCHING: Direct catching by hand produced:-

3 A.funestus Group.
 7 A.coustani.
 1 A.marshalli.

(d)/.....

(d) PIT SHELTERS: A pit shelter at Tulwane produced:-

- 1 A. Funestus Group.
- 2 A. Marshalli.

(e) OTHER ENTOMOLOGICAL ACTIVITIES: Mr. S. K. Sobti, W.H.O. Entomologist will submit a report in this connection.

9. W.H.O. ASSISTANCE:

Dr. L. Delfini, W.H.O. Malariologist came to Swaziland for a few weeks on a short term consultantship and Mr. S. K. Sobti, W.H.O. Entomologist who arrived at the same time as Dr. Delfini was sent by W.H.O. at our request to assist with certain entomological problems. His stay here, it is anticipated, will last at least ten months.

10. MEETING:

A Meeting with the Portuguese Malaria Control Authorities took place at Nomahasha during March to exchange information of mutual interest.

11. LECTURE:

A Lecture on Malaria was given to student nurses of the Raleigh Fitkin Memorial Hospital, Manzini.

12. PUBLICATION:

An article entitled "Notes on the Malaria Vectors of Southern Africa and their Control" was published in the June issue of "Public Health".

3. POLIOMYELITIS:

Oral anti-Polio Vaccine:

	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>Booster</u>
Health Office, Manzini	107	86	80	22
Red Cross Clinic, Manzini	25	29	31	-
<u>Public Health Centres:</u>				
Manzini	42	28	-	-
Hlatikulu	855	1000	152	-
Mbabane	812	500	173	-
	1841	1643	436	22

32 cases were reported during the year with no deaths.

4. DIPHTHERIA:

Triple Vaccine (D.P.T.)

Health Office, Manzini	60	48	39	1
Red Cross Clinic, Manzini	57	29	30	-
<u>Public Health Centres:</u>				
Manzini	73	28	-	-
Hlatikulu	155	200	32	-
Mbabane	551	400	81	-
	896	705	182	1

7 cases were reported during the year with 2 deaths.

5. SMALLPOX:

Vaccinations against Smallpox:

	<u>Primary</u>	<u>Re-Vacc.</u>	<u>Total</u>
Health Office, Manzini	313	3647	3960
<u>Public Health Centres:</u>			
Manzini	-	-	-
Hlatikulu	156	-	156
Mbabane	1452	-	1452
Havelock Mine	389	662	1051
			6619

20 cases occurred during the year with no deaths.

6. ENTERIC FEVER:

T.A.B. Vaccines given as follows:	<u>1st</u>	<u>2nd</u>	<u>Booster</u>
Public Health Centre, Hlatikulu	46	-	-

105 cases occurred during the year with 8 deaths.

7. VENEREAL DISEASE:

Figures for attendance at Government and Mission Hospitals and Clinics are appended.

	<u>Syphilis:</u>	<u>Gonorrhoea:</u>
1964	8590	13717
1965	11915	14432
1966	9242	13327
1967	8532	12107
1968	11046	12947

THE LEPER COLONY

In 1948 the Swaziland Government and the Church of the Nazarene signed an agreement consigning the care of the Leper Settlement to the R.F.M. Hospital. During the past twenty years, 600 sufferers of Leprosy have been cared for and discharged by the settlement. Although leprosy is not endemic in Swaziland, as it is in some of the more northern countries of Africa, yet it still is a disease entity that requires constant vigilance on the part of the doctors of the territory.

The following annual statistics verify this:

	<u>Male</u>	<u>Female</u>	<u>Children</u>	<u>Total</u>
Admissions	7	4	3	14
Re-admissions	8	5	1	14
Patients in Residence				
January 1st, 1968	30	18	8	56
December 31st, 1968	27	16	2	45
Discharges free from active disease	17	10	12	39
Comparative figures (Total in residence)		<u>1966</u>	<u>1967</u>	<u>1968</u>
		44	56	45

	<u>Male</u>	<u>Female</u>	<u>Children</u>	<u>Total</u>
Discharges due to death	0	0	0	0
Discharges due to desertion	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	0	0

Origin of patients during the year, new and re-admissions:

Mankaiana	4
Manzini	1
Piggs Peak	8
Mbabane	7
Stegi	6
Hlatikulu	2
	<u>28</u>

Classification of Disease Manifestations:

	<u>Male</u>	<u>Female</u>	<u>Children</u>	<u>Total</u>
Lepromatous	13	7	-	20
Tuberculous	29	21	14	64
				<u>84</u>

Average age of patient: 36 years

Proportion of Children to Total Admissions:

Children:	4
Adults:	<u>24</u>
Total	28

16.66% of admissions were children

Average Monthly Census:

<u>Male</u>	<u>Female</u>	<u>Children</u>	<u>Total</u>
27	18	3	49

Comparative census figures:

<u>1966</u>	<u>1967</u>	<u>1968</u>
42.8	54	49

Surgical Operations:

	<u>Male</u>	<u>Female</u>	<u>Children</u>
Orthopaedic and plastic surgery	6	3	0
Other Operations	<u>35</u>	<u>23</u>	<u>0</u>
	41	26	0

NEEDS OF PATIENTS:

With donations from the Rotary Club and the Red Cross we were able to acquire sufficient pairs of crutches for our present needs. However, one patient is in very great need of an artificial leg.

OCCUPATIONAL THERAPY:

This plays a big place in the care and ultimate rehabilitation of the patients.

Farming

The 1968 crop of radishes and mealies were the best in the district and produced exhibition-grade products. Upon consultation with the Veterinary Department, it was deemed desirable to cut out a lot of the poorer and scrub cattle. It is hoped that cattle with a higher milk yield will be obtained to supply more milk for the patients.

Oxfam Project

The 192 hens have been at the peak of their production this year. There were as many eggs as the patients could use, as well as a considerable amount for sale to the public. However, it would be advisable to butcher most of the present stock and reinvest in pullets this spring.

Angora Goats

The Angora goats have been a disappointment, as many have died from sickness and some have been stolen. Crossing with the local Swazi goats has been only partly successful.

Handicraft

Handicraft has continually been encouraged. Knitting, crocheting, and weaving of sisal, hemp and grass into rugs, baskets, etc., have proved of value in preventing crippling of the hands. Spinning and preparation of the Angora wool has caused some difficulties to the patients by its irritating effect to the nose and mucous membranes.

BILHARZIA:

1. Bilharzia Control Pilot Project at Phonjwana,
Lubombo District:

Malacology:

	<u>Dam</u>	<u>Stream</u>
11th January, 1968	0 Physopsis 1 B. Forskalii	0 Physopsis 3 B. Forskalii
26th March, 1968	0 Physopsis 3 B. Forskalii	0 Physopsis 7 B. Forskalii
30th April, 1968	0 Physopsis 34 B. Forskalii	0 Physopsis 3 B. Forskalii
31st July, 1968	0 Physopsis 2 B. Forskalii	0 Physopsis 3 B. Forskalii
27th August, 1968	0 Physopsis 5 B. Forskalii	0 Physopsis 13 B. Forskalii
22nd October, 1968	0 Physopsis 1 B. Forskalii 8 Lymnaea	0 Physopsis 37 B. Forskalii
26th November, 1968	0 Physopsis 1 B. Forskalii 15 Lymnaea	0 Physopsis 15 B. Forskalii

Parasitology:

Further urine examinations for *S. Haematobium* compared with the results obtained in 1961 and 1967 indicate that the snail control has been successful as the following will show:-

<u>Year</u>	<u>Age Group</u>	<u>No. Examined</u>	<u>No. + Ve</u>	<u>% + Ve</u>
March, 1961	6 - 9 years (Grades 1 & 2)	46	12	26.0
July, 1967	6 - 9 years (Grades 1 & 2)	60	7	11.66
October, 1968	6 - 10 years (Grades 1 to Std. 1)	45	0	0 - Negatives from last year re- peated.

2. Bilharzia Control Pilot Project at Nomhasha, Lubombo District:

Malacology:

<u>Date</u>	<u>Dam near Police Station</u>	<u>Swamp</u>	<u>Dam No. 2</u>	<u>Dam No. 5</u>	<u>Nkoleshane Dip Dam and Pools</u>
23.1.68	0 Snails	"Bayluscide"			
27.3.68	0 Snails	17 Physopsis "Bayluscide"			
20.5.68	0 Snails				
21.5.68		1 Physopsis "Bayluscide" 0 Snails			
20.6.68	1 Physopsis "Bayluscide"	2 Physopsis			
21.6.68	0 Snails	"Bayluscide"			
20.8.68	3 Physopsis "Bayluscide"	0 Snails			
21.8.68	0 Physopsis 7 B. Forskalii				
25.9.68	0 Snails	1 Physopsis "Bayluscide"			
31.10.68	0 Snails				
1.11.68		0 Snails	18 B. Tropicus 2 Lymnaea	31 B. Tropicus	4 Physopsis 12 Biomphalaria 18 Lymnaea 26 Anisus 4 Segmentorhis "Bayluscide"
					1 Physopsis shedding mammalian cercariae

Parasitology:

Further specimens of urines and stools from Nomahasha Central School were examined. The following table indicates the present trend:-

<u>S. Haematobium</u>				
<u>Date</u>	<u>Age Group</u>	<u>No. Examined</u>	<u>No. + Ve</u>	<u>% + Ve</u>
14.7.67	5 - 9 years	60	25	41.7
30.10.68	Children who were negative 14.7.67	25	5	20.0
30.10.68	5 - 9 years (New Children)	44	16	36.4

<u>S. Mansoni</u>				
<u>Date</u>	<u>Age Group</u>	<u>No. Examined</u>	<u>No. + Ve</u>	<u>% + Ve</u>
14.7.67	5 - 9 years	60	8	13.3
30.10.68	Children who were negative 14.7.67	25	2	8.0
30.10.68	5 - 9 years (New Children)	44	8	18.2

The above results lead to further searching for possible additional foci of infection and as a result the one at Nkaleshane as indicated under the heading "Malacology" was found and treated.

3. Bilharzia Control Pilot Project at Madonsa, Manzini District:

Malacology:

Madonsa Pilot Project Area:

<u>Date</u>	<u>No. of Physopsis</u>	<u>No. of Points where Physopsis found</u>	<u>Total No. of Points Surveyed</u>	<u>Application of Molluscicide</u>	<u>No. of Points Treated</u>
8.1.68	19	5	23	Bayluscide	25
9-10.1.68					
17.1.68	0		23		
7-8.2.68	0		23	Bayluscide	All Points on main stream only.
5-6.3.68	19	5	23		
15.3.68					
19.3.68	3	1	23	Bayluscide	1
29.3.68					
29.4.68	9	4	23	Bayluscide	4
1.5.68					
3.5.68				Frescon	8
5-6.6.68	15	5	23		
11.6.68					
13.6.68	0	8	25		
23-4.7.68	0	0	25	Bayluscide	2
28-9.8.68	2	2	25		
3.9.68				Bayluscide	1
8.10.68	1	1	25		
9.10.68					
6.11.68	3	2	25		

<u>Date</u>	<u>No. of Physopsis</u>	<u>No. of Points where Physopsis found</u>	<u>Total No. of Points Surveyed</u>	<u>Application of Molluscicide</u>	<u>No. of Points Treated</u>
7.11.68				Bayluscide	25
14.11.68	0	0	25		
4-5.12.68	0	0	25		

Logoba "Control" Area:

<u>Date</u>	<u><3 mm</u>	<u>>3 mm</u>	<u>PHYSOPSIS >6 mm</u>	<u>Total</u>	<u>Shedding Mammalian Cercariae</u>
5.1.68	0	6	90	96	4
6.2.68	0	4	71	75	2
8.3.68	0	1	40	41	1
8.4.68	0	1	38(1)	39(1)	1
2.5.68	0	5(1)	40	45(1)	0
7.6.68	0	0	18	18	0
29.7.68	0	0	23	23	0
4.9.68	0	2	32	34	10
10.10.68	0	0	27(6)	27(6)	0
3.12.68	0	0	23	23	0

Parasitology:

Madonsa Pilot Project Area:

Further urine examinations for S.Haematobium compared with last year's results are as follows:-

<u>Date</u>	<u>Age Group</u>	<u>No. Examined</u>	<u>No. + Ve</u>	<u>% + Ve</u>
19.7.67 and 10.8.67	1 - 6 years	32	20	62.5
23.10.67 and 8.11.67	1 - 6 years	32	8	25.0

Logoba "Control" Area:

27-28.7.67	1 - 6 years	74	16	21.6
24.10 - 4.11.68	1 - 6 years	50	5	10.0
"	Children who were negative 27 - 28.7.67	13	1	7.7

4. Snail Control at Sand River Dam - S.I.S., Tshaneni.

Field Trials with a Floating Formulation of Bayluscide.

Experiments with mealie cobs soaked in Bayluscide (cobs weighing + 20mg. each soaked in 1 Kg. of Bayluscide in 1 litre of water for 1 minute as tried by R. Strufe et al. in the Bilharziasis Control Pilot Project Egypt 49") were carried out during February. Due to wave action, these cobs had to be anchored at regular intervals along the shoreline.

The day before the floating formulation was applied a survey was carried out, the result of which was as follows:-

120 yards of Northern Section -	59	Biomphalaria	19	Physopsis
120 yards of Southern Section -	22	"	2	"

The day after application the result was:-

120 yards of Northern Section -	17(11)	"	2(4)	"
120 yards of Southern Section -	20	"	1	"

() = dead snails

Mealie cobs were also tried in a quiescent stretch of shoreline in a bay of the Dam that abounded in Biomphalaria and where Physopsis were also found in fair numbers. The day after application 216 dead Biomphalaria and 4 dead Physopsis were collected.

This appears to be a good method for application to stagnant water devoid of dense vegetation.

Field Trials with Granular Formulations of Bayluscide.

Granular formulations of Bayluscide were applied to the same fore-shore area during March. One granular formulation was made by mixing 1 part cement, 5 parts sand, 1 part Bayluscide and another by mixing 12 parts by weight of white cement to 1 of Bayluscide.

The pre-treatment survey revealed:-

120 yards Northern Section -	14	Biomphalaria	0	Physopsis
120 yards Southern Section -	13	"	3	"

All snails collected were placed in 2 separate pockets and these treated separately with "Cement/Sand" and "White Cement" granules. The next day the only live snails found in these pockets were 1 Biomphalaria and 1 Physopsis in the "White Cement" pocket. The whole area was then treated with "Cement/Sand" granules and resurveyed in 6 days time when 4 live Biophalaria only were found in the "White Cement" pocket.

The Cement - Sand - Bayluscide granules are cheaper and more effective than the White Cement - Bayluscide granules are probably more persistent and give better coverage than the liquid formulation.

Without further molluscicidal operations the following surveys were done:-

9.4.68 - 120 yards of Northern Section -	4(2)	Biomphalaria	0(4)	Physopsis
9.4.68 - 120 yards of Southern Section -	6(5)	"	0(2)	"
8.5.68 - 120 yards of Northern Section -	2(2)	"	0(3)	"
8.5.68 - 120 yards of Southern Section -	14(5)	"	0	"

8.5.68 - The 16 Biophalaria collected were placed together in a pocket and a granular formulation of 1 Bayluscide to 20 sand was applied.

18.6.68 - 120 yards of Northern Section -	17	Biomphalaria	2	Physopsis
18.6.68 - 120 yards of Southern Section -	15	"	1	"

It was observed that snails are generally found in this dam only where there is vegetation, especially the emergent water weed "Jussieu". A recommendation was subsequently made to the C.D.C. at Tshaneni to keep the 240 yard section free of all vegetation.

Thereafter the following surveys were done:-

2.10.68 - 120 yards of Northern Section - 191(7)Biomphalaria 4 Physopsis
(Vegetation not yet removed)
2.10.68 - 120 yards of Southern Section - 25(3) " (1) "
(Vegetation not yet removed)
13.11.68 - 120 yards of Northern Section - 20(5) " "
(Vegetation not yet removed)
13.11.68 - 120 yards of Southern Section - 22(5) " (3) "
(Vegetation not yet removed)

Further surveys of "contact points" were carried out to ascertain population densities and infectivity. The following are the results:-

2.10.68 - Contact Point No. 1 - 30(2) Biomphalaria }
2 Physopsis }
2 - 67(3) Biomphalaria }
0 Physopsis }
3 - 65(2) Biomphalaria } Southern
1 Physopsis } side of
4 - 43 Biomphalaria } Dam.
73 Physopsis }
5 - 58 Biomphalaria }
2 Physopsis }
6 - 138 Biomphalaria }
1 Physopsis }
13.11.68 - Contact Point No. 1 - 18(1) Biomphalaria }
0 Physopsis }
2 - 38(8) Biomphalaria } Northern
0 Physopsis } side of
3 - 9(3) Biomphalaria } Dam.
0 Physopsis }
4 - 17(2) Biomphalaria }
0 Physopsis }
5 - 9 Biomphalaria }
0 Physopsis }

- N.B.: 1. () = Dead Snails.
2. A drop in water level resulted in high snail mortalities on the 13.11.68.

5. Bilharzia Control at Bulandeni.

Malacology:

The first and second surveys conducted on the 7th November, 1967 and the 14th December, 1967 respectively failed to reveal Physopsis in the "Mababane Pool" and local water supply which were the only two known common possible sources of infection (64% S.Haematobium at the local school). The third survey, however, on the 18th April, 1968 revealed 3 Physopsis (one of which was shedding mammalian cercariae) in the "Mababane Pool".

The following table indicates the snail surveys and control undertaken:-

<u>Date</u>	<u>Mababane Stream and Pool</u>	<u>School Water Supply</u>	<u>Dam near School</u>
18.4.68	4 Physopsis	0 Physopsis	
18.4.68	"Bayluscide"		
13.8.68	0 Physopsis		14 Physopsis
14.8.68	"Bayluscide"		"Bayluscide"
19.11.68			0 Physopsis
20.11.68	0 Physopsis		9 Physopsis
24.12.68	0 Physopsis		9 Physopsis
24.12.68			"Bayluscide"

Treatment:

52 of the originally 59 positive Bilharzia Haematobium patients at the school were treated with Nilodin (60 mg. per kilo of body weight given in divided doses over a period of 3 days) and subsequently re-examined 5 weeks after completion of treatment. 13 out of the 52 were still positive on a single examination = 75% apparent cures. Those patients that are still at the school next year will have to be followed up for a number of months.

6. Bilharzia Control - Mzimnene River, Manzini.

The Town Management Board of Manzini decided to attempt Bilharzia Control in the town. Advice was given on control measures and as a result 5 contact points were chosen and their Health Assistant instructed in the necessary procedures which involved surveys and mollusciciding. Urines were also collected from pre-school children and examined at the Health Office in order to obtain base line data. Regular surveys and mollusciciding will in future be carried out by them and later possibly urines examined by them too.

7. Miscellaneous Surveys:

<u>Date</u>	<u>Place</u>	<u>Result</u>
19.1.68	Mzimnene River: Sprengell's Farm Manzini (small area)	98 Biophalaria - None shedding mammalian cercariae.
15.2.68	Drews' Dam, Mbabane	653 " - " " 269 Physopsis
27.2.68	Edwaleni Dam, Matsapha (small area)	No snails - level dropped
"	Usutshwana River (small portion above bridge at Matsapha)	0 Snails
"	Side pools Usutshwana River (Nr. bridge at Matsapha)	5 Biomphalaria - None shedding mammalian cercariae. 8 Physopsis
12.6.68	Embekelweni Lutheran School	43 out of 57 + ve for S.Haemat. = 75%
"	Sibozini Stream (small portion)	3 Physopsis
	Shoshatuba Stream " "	0
	Mtilane Stream " "	0
14.6.68	Jacob Dlamini's Kraal, Matsapa	5 out of 12 + ve for S.Haemat. = 41.7%
"	Springs for domestic and irrigation purposes	32 Physopsis
	Adjoining springs	7 Physopsis - springs treated with Bayluscide and cleaned out.
17.6.68	Re-survey of Irrigation Spring	15 dead Physopsis.

8. Lecture.

Lectures on Bilharzia were given to the Standards 4 and 5 pupils of the Sydney Williams Primary School at Manzini, and to the student nurses at the Raleigh Fitkin Memorial Hospital, Manzini.

9. Article.

An article entitled "The Identification of Bilharzia Snails, Cercariae and Ova in South Africa" was published in the December issue of "Public Health".

10. Bilharzia Examinations at Health Office.

373 urines and 22 stools were examined for Bilharzia at the Health Office, Manzini.

11. Bilharzia (vesical) cases totalled 654 and Bilharzia (intestinal) cases totalled 20 at Government and Mission Hospitals during the year with 0 deaths.

CHAPTER III

GOVERNMENT AND SUBSIDISED MISSION HOSPITALS AND CLINICS:

Comparative tables for three years, setting out the staffing of Government Hospitals and the admissions, attendances, etc at Government and Subsidised Mission Hospitals and Clinics, follow:

GOVERNMENT AND SUBSIDISED MISSION HOSPITALS AND CLINICS:

	1966	1967	1968	1966	1967	1968	1966	1967	1968	1966	1967	1968	1966	1967	1968	1966	1968	1966	1967	1968
	Mbabane:			Hlatikulu:			Mankaiana:			Pigg's Peak:			Goedgegun:			TB Mat-sapha	Mental Mat-sapha	TOTALS		
Hospital Staff:																				
Medical Officers	5	6	6	4	4	3	-	-	-	1	1	1	1	1	1	-	-	11	12	11
Matron	1	1	1	1	1	1	-	-	1	-	-	1	-	-	-	1	-	2	2	5
Nursing Sisters	9	7	11	4	4	6	1	1	-	1	1	-	1	1	1	-	-	17	11	18
Pharmacists +	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-
Radiographer	1	1	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-	1	1	4
Senior Radiographer++	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Housekeeper +++	1	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	1	1	2	3
Medical Assistant	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	1	1
Laboratory Assistant	2	2	2	1	1	1	-	-	-	-	1	1	-	-	-	-	-	3	3	3
Dispensers	2	3	3	2	2	2	-	-	-	-	-	-	-	-	-	-	-	4	5	5
Pupil Dispensers ^^	-	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	4	4	-
Nurses	36	49	76	30	40	48	5	7	10	7	9	17	3	4	7	9	3	81	109	170
Nurse Aides ^^^	3	7	15	-	-	13	-	1	2	-	-	2	-	-	1	4	-	3	4	37
Ambulance Drivers =	3	3	5	2	3	2	1	1	1	1	1	1	1	1	1	-	-	8	9	10
Orderlies	15	18	29	12	12	19	1	3	3	1	3	6	2	2	4	3	-	31	39	64
Hospital Supervisor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
Notes: + Pharmacists now stationed at Central Medical Stores; ++ Senior Radiographer covers the Territory; +++ One housekeeper shared by T.B. and Mental Hospitals; ^^ 4 Pupil Dispensers stationed at Central Medical Stores; ^^^Nurse Aides now include old classification of Outpatient Attendants; = Ambulance Drivers - there are two extra drivers at Central Medical Stores who can be called upon.																				
BEDS:																				
a) Full-Paying	14	14	14	8	8	8	-	-	-	-	-	-	-	-	-	-	-	22	22	22
b) Part-Paying	156	156	161	134	134	155	33	33	33	50	50	50	12	12	12	200	200	415	415	811
ADMISSIONS:																				
a) Full-paying	510	620	591	90	94	204	-	-	-	-	-	-	-	-	-	-	-	600	714	795
b) Part-paying	4549	6289	8011	4324	4862	4121	932	1488	1837	1475	1538	1752	635	1524	969	482	162	12100	15701	17334
DAILY AVERAGE																				
NO. IN-PATIENTS:																				
a) Full paying.	14	24	57	2	1	4	-	-	-	-	-	-	-	-	-	-	-	16	25	61
b) Part-Paying.	290	281	367	274	180	221	28	32	39	66	68	70	12	17	18	89	146	703	578	950
DEATHS:																				
	193	228	380	188	164	128	16	7	16	62	39	56	19	41	40	11	7	480	489	638
OPERATIONS:																				
a) Major	459	508	484	164	135	143	-	-	-	5	2	2	-	-	-	-	-	623	503	629
b) Minor	835	738	733	551	811	755	-	-	-	60	76	68	-	-	-	-	-	1386	1257	1556
X-RAY:																				
a) Examinations	6215	7553	8271	3953	3901	4786	-	-	-	674	955	726	-	-	-	-	-	10168	7441	13783
b) Screening	142	52	11	3	-	-	-	-	-	-	-	-	-	-	-	-	-	145	55	11
OUTPATIENTS:																				
1st Attendances:																				
a) Full-Paying	2919	4383	3591	130	217	526	74	22	20	222	158	78	390	363	258	-	-	4715	5143	4473
b) Part-Paying	21021	20037	20062	13285	10964	10051	6862	8054	6906	8134	7761	8269	8221	10028	10057	468	-	62697	56844	55813
Sub.Attendances:																				
a) Full-Paying	3468	2997	1395	79	140	521	2	6	16	16	5	33	489	487	110	-	-	4054	3635	2075
b) Part-Paying	32311	20734	15776	11135	7767	8508	941	2843	2703	1364	1848	1530	6200	9431	6847	-	-	52992	42623	35364
GRAND TOTAL:	60719	48151	39924	24659	19088	19606	7859	10925	9645	9736	9772	9910	15300	20309	17272	468	-	124458	108245	97725

SUBSIDISED MISSION HOSPITALS:

- 30 -

Raleigh Fitkin Memorial Hospital:			Good Shepherd Hospital:			TOTALS:		
1966	1967	1968	1966	1967	1968	1966	1967	1968
<u>BEDS:</u>								
a) Full-Paying	15	23	22	5	5	5	20	28
b) Part-Paying	260	297	300	62	62	62	322	359
<u>ADMISSIONS:</u>								
a) Full-Paying	540	573	508	132	147	76	720	672
b) Part-Paying	5204	5966	5833	1575	1478	1158	6779	7444
<u>DAILY AVERAGE NO. OF IN-PATIENTS:</u>								
a) Full-Paying	10	10	11	2	2	2	12	12
b) Part-Paying	262	259	252	47	35	35	309	294
<u>DEATHS:</u>								
	304	339	382	42	31	53	346	370
<u>OPERATIONS:</u>								
a) Major	591	590	485	35	28	2	626	618
b) Minor	814	950	984	272	202	194	1086	1152
<u>X-RAY:</u>								
a) Examinations	3706	4460	5049	461	2025	1027	4167	6485
b) Screenings	-	-	4	-	-	-	-	-
<u>OUTPATIENTS:</u>								
<u>1st Attendances:</u>								
a) Full-Paying	2532	2320	2503	955	1191	996	3487	3511
b) Part-Paying	13885	8497	12132	13703	14226	10362	27588	22723
<u>Subsequent Attendances:</u>								
a) Full-Paying	1700	2868	2555	435	414	357	2135	3282
b) Part-Paying	11181	15444	15235	3247	5214	3138	4428	20658
<u>GRAND TOTALS:</u>								
	27298	29129	32425	18340	21045	14853	47638	50174

47278

4. SUBSIDISED MISSION CLINICS:

Nazarene Missions:

	<u>Totals:</u>			<u>Mission Totals:</u>		
Stegi	7302	6488	6538			
Endingeni	5105	3607	3452			
Pigg's Peak	3968	4065	4567			
Mliba	2776	2167	2347			
Mafutheni	1463	1460	1252			
Bhekinkosi	3784	1786	2458			
Balegane	2406	1981	2583			
Malinda	3042	3269	3283			
Mayiwane	6871	4761	7271			
Tambankulu	10179	9463	9941			
Malandela	1025	411	71			
Lalela	1143	1364	942			
Tembelihle	1593	580	1661			
Manzana	345	453	315			
Kashewula	318	598	455			
Engculwini	1590	585	672			
Esigcaweni	248	1199	830	53158	44237	48638

Roman Catholic Missions:

Our Lady of Sorrows	9725	8955	9070			
St. Juliana	10401	7244	4737			
Mathanjani	1061	1110	--			
St. Michael	256	991	571			
St. Boniface	138	670	497			
St. Mary's	-	14390	--	21581	33360	14875

Total Attendances:District Totals:

	1966	1967	1968	1966	1967	1968
MBABANE DISTRICT:						
Eluyengweni Clinic.	16066	15094	11061	16066	15094	11061

HLATIKULU DISTRICT:

Gege	-	6563	7865			
Mhlotsheni	8403	8366	8558			
Hluti	10221	7629	9442			
Sipofaneni	9508	12533	12087			
Vimy Ridge (from Jan.1968 to June 1968 - then closed)	983	1062	671			
Goliel (Opened in August 1968)	-	-	2528			
Edwaleni +++	6473	6109	7676			
Mahamba	-	6615	6983			
Lubuli +	6570	6757	6140			
St. Phillips Mission ++	4921	4483	4773			
New Haven Mission	15838	13824	7378			
Mobile Clinic (closed in July, 1968)	-	21317	15502	62917	96308	89603

MANKAIANA DISTRICT:

Mahlangatsha	7634	5856	4063			
Dwalile	7241	5553	4958	14875	11409	9021

PIGG'S PEAK DISTRICT:

Horo	13090	15457	14425			
Lester's +	11634	7737	7971			
Mahlangatane	10544	13413	10815			
Nkaba	2329	3048	2522	39597	39655	35733

STEGI DISTRICT:

Nomahasha +	2184	3195	2585	2184	3195	2585
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MEDICAL OUTPOSTS: (visited by Sister-in-Charge, Mankaisana Hospital, but not staffed permanently by a nurse)

Mgazini	4268	1414	1572			
Endinilembe	1918	2149	1266			
Mangqongqo	2618	3008	2610	8804	6571	5448

MANZINI DISTRICT:

Sidvokodvo Clinic ++++	-	-	11132	-	-	11132
------------------------	---	---	-------	---	---	-------

- + Clinic controlled by Swazi National Treasury, but visited and supervised by Government Medical Officers.
 ++ Mission Clinics visited and supervised by Government Medical Officers.
 +++ Clinics at Missions rented and run by the Medical Department.
 ++++ Railway Clinic run and supervised by Swaziland Railway Medical Officer.

2.

HAVELOCK MINE HOSPITAL

The number of Africans who were not mine employees or their dependants who were treated at the Havelock Mine Hospital was as follows:

	<u>1967</u>	<u>1968</u>
Number of admissions	262	404
Number of Out-patients	New cases 986	1460
	Reattendances 1436	2347
In-patient days	1607	2560
Daily number of In-patients	4.5	6.3

3.

MEDICO-LEGAL POSTMORTEM EXAMINATIONS

The number of medico-legal post-mortem examinations carried out at Government and subsidised Mission Hospitals from 1965 to 1968 were as follows:

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
Mbabane Hospital	51	33	43	44
Raleigh Fitkin Memorial Hospital	94	87	77	127
Piggs Peak Hospital	31	60	67	37
Good Shepherd Hospital	35	56	70	36
Hlatikulu Hospital	50	91	44	52

4. (a) Assault and Rape Examinations

	<u>1966</u>	<u>1967</u>	<u>1968</u>
Mbabane Hospital	215	398	209
Piggs Peak Hospital	Not available	not available	478
Raleigh Fitkin Hospital	-	-	428

(b) Driving under Influence of Liquor or Drug Examinations

	<u>1966</u>	<u>1967</u>	<u>1968</u>
Mbabane Hospital	21	37	7
Raleigh Fitkin Hospital	Not available	not available	52

Figures from other centres are not available.

All the examinations under 4 (a) and (b) were done at the request of the Police.

MATSAPA MENTAL INSTITUTION - 1968

Statistics:

	<u>Male</u>	<u>Female</u>	<u>Total</u>
1. No. of patients on 1-1-68	84	33	117
Admitted during 1968	115	47	162
Discharged " "	83	20	103
Absconded " "	25	-	25
Died " "	4	3	7
No. of patients on 31-12-68	87	57	144

Number of in-patient days:

Male - 35567 average of 180 days per patient
 Female - 17744 average of 222 days per patient
 Total - 53311 average of 191 days per patient

The female section is still situated in Mbabane and supervision of administrative work in this section from Matsapa has met with only partial success.

Statistics from this section, other than those recorded above, are incomplete and my report will concentrate on the male section where figures are on hand.

2. Division of male in-patients according to status:

	<u>Certified</u>	<u>Voluntary</u>	<u>Temporary</u>	<u>Total</u>
	101	81	17	199
Discharged	32	43	8	83
Absconded	11	8	6	25
Died	2	-	2	4
In-patients on 31-12-68	56	30	1	87

3. As far as can be ascertained in the absence of a qualified Psychiatrist the diagnosis of psychotic illnesses treated during the year appears to be as follows:

Schizophrenia 72
 Catatonic Schizophrenia 13
 Recurrent Schizophrenia 14
 Manic Psychosis 6
 Epileptic Psychosis 17
 Senile Dementia 24
 Pellagra Psychosis 19
 Pellagra and Alcohol Psychosis 26
 Not diagnosed 8

The physical condition of patients, especially that of long term in-patients is good.

A few cases of common cold, influenza and other minor physical disorders were treated at the hospital.

It has been necessary to refer 4 patients to R.F.M. Hospital for investigation of gastric disorders and one case of acute appendicitis.

Incidents of violence, apart from minor squabbles among patients, were very few.

Only in three instances was it necessary to refer a patient for medical treatment, in each case of minor cuts and abrasions.

TREATMENT

Drug therapy has been the main course of treatment, although a start has been made with Electro-Convulsive Therapy with encouraging results.

E.C.T. courses consisted of 12 treatments (2 per week) and a total of 28 patients took part.

As this type of treatment requires to be administered by a Medical Officer and a large number of Staff is needed during and after treatment, it was necessary to limit the number of patients to between 7 and 9 at the time.

Of the 28 patients who completed a E.C.T. course 16 were discharged and marked improvement was noted in another eight.

Occupational and Recreational Therapy

Keeping mental patients suitably occupied is an essential part of their treatment.

No special department of Occupational Therapy has as yet been established, but with the help of the Ministry of Agriculture it was possible to set out a vegetable garden which is maintained by patients with the minimum of supervision.

In the five months since it's establishment the garden has produced nearly 14.000 lb. of fresh vegetables which have been consumed jointly by T.B. and mental patients.

Patients also assist in the maintenance of grounds, cleaning of barracks, in the kitchen and with other routine tasks.

The female section has helped by sewing their own uniforms laundering of clothing for both female and male patients, and produced a number of knitted and woven articles.

Members of the Women's Institute pay weekly visits to the patients whom they supply with sweets and fruit.

Good use is made of games, puzzles, reading matter and sporting equipment, also supplied by the ladies.

Comments

It will be seen from figures in Para. 1 that the number of remaining in-patients has increased by only 3 on the male side despite the influx of 14 chronic patients from mental institutions in the Republic.

The rather high incidence of escapes has some bearing on this low increase.

However, if the average discharge rate is applied to escaped patients, the total increase of in-patients for the year would still have been only ten.

The majority of in-patients who managed to escape were diagnosed as suffering from Pellagra and Alcohol Psychosis.

This type of patient normally responds well to treatment, mainly as a result of absence of alcohol, and their discharge rate is considerably higher than that of acute psychotic patients.

It is also expected that the discharge rate of female patients will be on par with that of the male once this Section is transferred to Matspa, where more intensive Drug and ElectroConvulsive Therapy can be given.

The incidence of escapes has been less in the latter part of the year and it can be assumed that on completion of further security arrangements by the Department of Prisons no further escape attempts will succeed.

If the present low increase of in-patients is maintained the accommodation for both male and female should be adequate for another three years.

Thought should however be given to provision of additional accommodation, preferably before the real necessity arises.

It is intended to establish the following Sections or Wards in the hospital:

1. Acute
2. Sub-acute
3. Convalescent
4. Chronic

In addition a sick-ward for both male and female patients will have to be established to eliminate the necessity of transferring mental patients with minor physical ailments to General hospitals.

A suitable building for this purpose would be the quarters at present occupied by Mr. Dlamini, the Male Nurse, provided other suitable accommodation can be found to house him.

To convert the present accommodation into a functional mental hospital it will be necessary to purchase additional Ward equipment and other stores.

With the help of the Central Medical Stores I am now compiling a list of needed equipment and its cost which I shall forward in due course in the hope that money will be made available during the next financial year.

STAFF TRAINING

The capacity of the mental hospital is 210 and, as I have mentioned earlier, this number should be reached in approximately three years.

At present, apart from the Supervisor, there are no qualified psychiatric nurses on the staff.

The usual ratio of qualified staff to patients is ten to one in mental hospitals. This means that the requirement for Matsapa hospital within the next three years will be at least twenty qualified nurses and supervisory grades.

Disregarding the financial implications for now, it is doubtful that suitable candidates for training with the physical, mental and educational requirements could be found in time to fill these positions, especially among the men.

Because of the risks involved it is inadvisable to allow female nurses to supervise and treat male mental patients.

On the average male outnumber female patients by three to two and it follows that more male than female staff will be required.

Bearing in mind that the minimum training period in Psychiatric nursing for trainees already qualified in General Nursing is eighteen months, (three years for others), I suggest that arrangements are made as soon as possible for the training of at least six male and four female Psychiatric nurses.

The Mental Health Service is now, and will become more so, a vital part of the Health Services in general and it would be unreasonable to expect this Section to function and maintain a high standard of service without qualified personnel.

CHAPTER IV

MATERNITY AND CHILD WELFARE SERVICES

Ante-Natal Clinics, outside of hospitals, produce the following figures, which are not complete, as not all clinics have submitted their figures, although there are few clinics not so doing:

	<u>1966</u>	<u>1967</u>	<u>1968</u>
Mbabane District (including 4439 done by Public Health Unit)	-	1085	5524
Mankaiana District	-	373	516
Hlatikulu District (including 2212 done by Public Health Unit)	-	4672	11606
Stegi District	-	206	1302
Manzini District (including 191 done by Public Health Unit)	2069	no return	5005
Piggs Peak District	47	378	606

Child Welfare and Pre-School Clinics

Mbabane District (including 10676 done by Public Health Unit)	272	5128	12539
Mankaiana District	-	2535	2769
Hlatikulu District (including 10554 done by Public Health Unit)	-	6991	24160
Stegi District	-	no return	no return
Manzini District (including 1247 done by Public Health Unit)	2940	no return	1454
Piggs Peak District	52	no return	no return

Hospitals The number of ante-natal examinations and confinements for the past four years has been as follows:

	<u>Ante-Natal Examinations</u>				<u>Confinements</u>			
	1965	1966	1967	1968	1965	1966	1967	1968
Mbabane Hospital	3302	3644	2385	698++	842	1047	1043	1366
Hlatikulu Hospital	941	1274	908	699++	405	539	644	675
Mankaiana Hospital	254	304	364	341	142	147	177	157
Piggs Peak Hospital	924	650	976	963	250	265	254	272
R.F.M. Hospital	3264	3181	3291	3860	1202	1139	1319	1428
Good Shepherd Hospital	1330	1428	2532	1609	224	130	177	226

++ 1st Ante-Natal examinations only. Subsequent ones are done by the Public Health Unit.

CHAPTER V

LABORATORY SERVICES

Histological examinations and other special investigations are carried out by the South African Institute for Medical Research in Johannesburg.

Small laboratories are situated in the following hospitals - Hlatikulu, and Raleigh Fitkin Memorial, and Good Shepherd are equipped for carrying out simple routine tests. Mbabane hospital is now able to carry out most tests - see figures below.

The W.H.O. T.B. Project Laboratory in Manzini now undertakes all examinations for tuberculosis both for hospitals and private practitioners. The Laboratory at the Health Office in Manzini undertakes all examinations for malaria and bilharzia; the results of these examinations are reported under the sections dealing with Malaria and Bilharzia and are not included in the figures which follow:

(a) <u>PATHOLOGY LABORATORY MBABANE HOSPITAL</u>				
<u>Test</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
Blood Culture	469	223	210	15
Widal (TMX)	1036	955	901	
Paul Bunnell Test	30	6	2	-
Stool Culture	253	204	129	19
Stool Parasitology	40	75	177	1315
Urine Chemistry	7	161	504	6909
Urine Culture	635	144	94	6
Urine Bilharzia	52	67	139	-
T.B. direct	26	45	55	39
Blood sugar	75	86	132	9
Blood Urea	197	157	120	27
Serum Protein	50	24	109	-
Serum Bilirubin	45	73	73	3
Blood Cholestrol	22	18	25	1
Blood Amylase	19	5	9	-
Serum Calcium	30	9	5	-
Serum Phosphatase	31	26	37	2
C.S. Fluid	82	86	100	14
Malaria Slides	2	2	163	96
Culture	294	297	244	47
Sensitivity tests	475	388	255	69
Blood Grouping	14	27	65	46
Blood Count	209	91	30	569
E.S.R.	190	74	9	266
Slides for Microscopy	17	20	10	1723
Diphtheria	20	8	18	2
Water Analysis	148	217	234	
Milk Analysis	128	251	234	
V.D.R.L. Tests	8480	11205	10635	
Hb. Tests	-	83	82	1009
Semen/Spermatazoa	-	-	-4	
	<hr/>			
TOTAL	12891	15471	14639	12190
	<hr/>			

Public Health Laboratory -
Manzini 1968

<u>TYPE OF TEST</u>	<u>TOTAL</u>
V.D.R.L. Test	8811
Widal Test (T.M.X.)	727
Abortus Test on Cows	42
Blood Cultures	237
Stool Cultures	217
Stool Routine	224
Smear Routine	63
Urine Routine	517
Urine Culture	202
Cultures, Swabs, etc.	415
Sensitivity Tests all cultures	517
T.B. Direct (AFB)	6
Bilharzia	126
Cerebral Spinal Fluid (complete)	175
Blood Count	223
Haemoglobin only	132
E.S.R.	10
Grouping including Rh factor	515
Paul Bunnell Test	5
Water Analysis (Bacteria)	255
Milk Analysis (Bacteria)	302
Blood Chemistry - Glucose	170
Urea	191
Bilirubin	71
Protein Total and A/G ratio	70
Uric Acid	25
Total Cholesterol	29
or	
Phosphatase Acid and Alkaline	71
Inorganic Phosphates	2
Amylase	14
Calcium	7
Thymol Turbidity	4
Transaminase G.O.T.	1
Platelet Count	3
Coagulation Time	1
Pregnancy Test	58
Semen Count	10
Smears for cytology	71
Smears for Leprosy	52
Smears for Malaria	3
	<hr/>
	14574

HOSPITAL LABORATORIES

	Hlatikulu Hospital				Raleigh Fitkin Memorial Hospital				Riggs Peak Hospital		Mankaiana Hospital	
	1965	1966	1967	1968	1965	1966	1967	1968	1967	1968	1968	1968
Urine Examination (including microscopy)	3323	3627	4749	3016	10019	10366	8594	4603	14	261	43	
Stool Examinations	1121	1341	911	1018	305	285	12	3	-	135		
Sputum Examinations	287	231	233	179	276	72	15	-	-	75	281	
Other Bacteriological Smears	82	370	-	356	160	23	3	2	-	17		
Full Blood Counts	236	187	48	177	1104	1571	970	1265	1	38	391	
Red Cell Counts	40	326	35	105	6	9	11	3	-	13		
White Cell Counts	437	418	410	348	40	476	219	1441	3	45		
E.S.R.	24	87	165	-	1060	765	266	272	1	15		
Haemoglobin Examinations	227	-	773	1121	-	2625	2069	2542	-	12		
Blood Films for Parasitology	242	-	-	-	-	299	-	-	-	46		
Other Examinations	4	22	13	-	2590	1919	7655	1347	-			
	6023	6456	7337	6415	15560	18110	19814	11478	19	657	715	

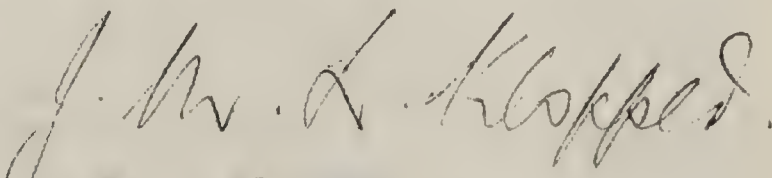
FINANCE

The financial statement of the Ministry for the period 1st April, 1968 to 31st December, 1968 is as follows:-

	<u>1967/68</u>	<u>1968</u>
Hospital, Health Centre and Other Fees	R 42,135	R 40,014
<u>Expenditure:</u>		
Personal Emoluments	R285,759	R386,784
Travelling Expenses	13,538	13,430
Operation and Maintenance of Vehicles	2,306	5,415
Other Transport Charges	11,071	5,698
Allowances and Fees - Medical	3,971	1,502
Maintenance of Patients	105,037	141,097
Maintenance of Mental Patients	16,250	12,633
Lighting and Heating	25,160	26,602
Hospital Equipment	10,361	24,598
Upkeep of Grounds	658	703
Temporary Reliefs	4,344	19,758
Anti-Malaria Measures	28,816	5,313
Bilharzia Control	389	-
Laboratory Services	2,991	2,411
Public Health Measures	200	300
Grants to Missions	58,548	46,865
High Commission Territory Nursing Council	466	-
Office Equipment	499	1,442
Uniforms and Protective Clothing	3,922	7,226
Maintenance of Hospital Equipment	-	1,963
Contingencies	-	76
Purchase of Replacement Vehicles	-	5,090
	<u>R574,286</u>	<u>R701,680</u>
<u>C. D. & W. Scheme Expenditure:</u>		
D.4912 Extensions to Medical Services	211,835	-
D.4913 Tuberculosis Control Scheme	30,670	-
D.6057 Construction of Clinics	8,523	-
<u>Total Expenditure on Medical and Sanitary Services</u>	<u>R825,314</u>	<u>R701,680</u>

CONCLUSION:

I wish to express my sincere appreciation of the loyal and efficient manner in which members of the Ministry carried out their duties during the year.


J. M. L. Kloppe
DIRECTOR OF MEDICAL SERVICES

APPENDIX I

MINISTRY OF HEALTH STAFFING (AS AT 31.12.68).

Minister of Health - The Hon. Dr. A. M. Nxumalo, M.H.A.

<u>Post</u>	<u>Holder</u>	<u>Station</u>
Permanent Secretary	Dr. F. Friedman	Medical
Director of Medical Services	Dr. J. M. L. Klopper	Headquarters
Consulting Ophthalmic Surgeon (Part-time)	Dr. G. Frampton	-
Senior Medical Officers (2)	Dr. S. P. N. Shongwe	Mbabane
	Dr. T. G. Behan (Acting)	Hlatikulu
Medical Officers (14)	Dr. F. J. Copeland	Pigg's Peak
	Dr. W. J. Downing	Mbabane
	Dr. Y. Kaplan	Manzini
	Dr. P. A. Kennedy	Mbabane
	Dr. R. H. O. Parker	Hlatikulu
	Dr. P. W. B. Pease	Hlatikulu
	Dr. P. van der Veer	Mbabane
	Dr. E. V. Blekie	Mbabane
	Dr. J. James (I.V.S.)	Hlatikulu
	Dr. P. Moss (O.X.F.A.M.)	Goedgegun
	Dr. Hague-Moss (Temporary)	Mbabane
Senior Medical Officer of Health	Dr. G. G. Murphy	Medical Headquarters
Medical Officer of Health	Dr. H. C. Armstrong	Manzini
Hospital Administrator (SCAAP)	Mr. K. H. P. Jenkin	Medical Headquarters
Senior Executive Officer	Mr. V. Gillett	"
Pharmacist/Storekeeper (2)	Mr. G. R. Gibbon	Central Medical Stores
	Mr. J. L. van der Vyver	
Laboratory Technologist	Mrs. M. E. Gibbon (Part-time)	Manzini
Senior Radiographer	Mrs. R. Elyan (Temporary)	Mbabane
Health Inspectors (5)	Mr. D. M. Eckard	Manzini
	Mr. L. N. Mbabama	Goedgegun
	Mr. C. D. Nxumalo	Mbabane
	Mr. L. L. Ntetwa	Stegi
	Mr. E. S. Magubane	Manzini
Mental Hospital Supervisor	Mr. K. Kral	Matsapa
Hospital Secretary	Mr. M. A. Baker	Mbabane
Assistant Accountant/ Accountant (3)	Mr. J. N. Hertslet	Medical Headquarters
	Mr. Petros Mbamali	Central Medical Stores
	Mr. Wilton Zwane	Medical Headquarters
Personal Secretary Grd. 1	Miss A. Cole	"
Radiographers (5)	Mrs. Agrineth Kanyile	Overseas Study Course
	Mr. Daniel Shabangu	Hlatikulu
	Mrs. Barbara Dlamini	Mbabane
	Mrs. S. M. Tshabalala	Mbabane
	Mrs. H. S. Ntsele	Hlatikulu
Matrons Grade I (2)	Mrs. A. C. T. Mabuza	Hlatikulu
	Mrs. P. T. Mdiniso	Mbabane
Matrons Grade II (3)	Mrs. V. W. S. Mabuza	Mankaiana
	Mrs. E. Mtetwa	Matsapa
	Mrs. M. B. Masipa	Baragwanath Hospital - Training Course

Nursing Sisters (20)

Mrs. G. T. Abrahams	Hlatikulu
Mrs. D. Bhengu	Mbabane
Mrs. A. Dlamini	P.H.U. Mbabane
Miss F. Dlamini	Hlatikulu
Mrs. N. Dlodlu	P.H.U. Mbabane
Mrs. M. Gininda	Mbabane
Mrs. S. Khoza	Mbabane
Miss J. Khumalo	Mbabane
Mrs. A. Mahluza	Mbabane
Mrs. T. Masuku	Hlatikulu
Mrs. E. Mpungose	Mbabane
Mrs. E. Mtetwa	Hlatikulu
Mrs. E. Nxumalo	Pigg's Peak
Mrs. I. J. Shilubane	Hlatikulu
Mrs. E. Simelane	Mbabane
Mrs. J. Zwane	Mbabane
Mrs. S. Kunene	Hlatikulu
Mrs. J. Mamba	Hlatikulu
Mrs. G. Nkosi	P.H.U. Mbabane
Mrs. S. C. Tshabalala	Hlatikulu

(Promoted 1.1.69)

" "

" "

" "

Staff Nurses (184)

Personal Secretaries

Grade 2 (3)

171 in post	
Miss L. F. Clarke	Mbabane
Miss D. Pieterse	Medical
Mrs. S. C. Whittle	Headquarters
Mr. A. F. K. Phiri	Hlatikulu

Medical Assistant

Housekeepers

Handymen

Accounts Officers

Clerical Officers

Dispensers

Laboratory Assistants

Microscopists

Health Assistants

Mental Patient Attendants

Senior Cooks

Senior Orderlies

Ambulance Drivers

Drivers

Telephone Operators

Typist Grd. 2/1

Hospital Orderlies

Nurse Aides

Cooks

Housemaids

Laundresses

Seamstresses

Nightwatchmen

Groundsmen

Messenger

Wardmaid

(3)	3 in post
(2)	2 in post
(7)	7 in post
(13)	12 in post
(10)	10 in post
(7)	7 in post
(7)	7 in post
(30)	25 in post
(13)	10 in post
(2)	2 in post
(3)	1 in post
(10)	10 in post
(8)	8 in post
(4)	4 in post
(1)	1 in post
(70)	69 in post
(37)	37 in post
(16)	16 in post
(7)	6 in post
(22)	22 in post
(5)	5 in post
(12)	12 in post
(6)	6 in post
(2)	2 in post
(3)	3 in post

Staff Notes:

Dr. C. Runciman left on completion of Contract in September.

Dr. F. Friedman was appointed Permanent Secretary on 6.9.68.

Dr. J. Klopper was appointed Director of Medical Services on 6.9.68.

Dr. E. V. Blekie was appointed Medical Officer on 17.8.68.

Dr. Hague-Moss was appointed Medical Officer (Temporary) on 16.12.68.

Dr. P. Moss was appointed Medical Officer (O.X.F.A.M.) on 25.11.68.

Dr. J. James was appointed Medical Officer (I.V.S.) on 12.10.68.

Mr. E. L. Samuda resigned post of S.E.O. (Acting) w.e.f. 28.7.68.

Mr. V. Gillett was appointed S.E.O. (Acting) on 16.10.68.
Mr. K. Jenkin, SCAAP Hospital Administrator, arrived 9.3.68.
Miss Susan Evans, Physiotherapist I.V.S., arrived 1.9.68.
Mr. E. S. Magubane appointed Health Inspector w.e.f. 1.5.68.
Mr. R. L. Philips, Health Educator, contract terminated 1.5.68.
Mr. K. Kral appointed Mental Hospital Supervisor w.e.f. 12.2.68.
Mr. M. A. Baker appointed Hospital Secretary w.e.f. 1.2.68.
Mrs. I. Lewis, Personal Secretary Grd. I, resigned w.e.f. 30.11.68.
Miss A. Cole, Personal Secretary Grd. I, appointed w.e.f. 29.11.68.
Mr. D. Shabangu appointed Radiographer w.e.f. 3.1.68.
Mrs. Agrineth Khanyile appointed Radiographer w.e.f. 1.4.68.
Mrs. B. Dlamini appointed Radiographer w.e.f. 19.8.68.
Miss D. Pieterse appointed Personal Secretary Grd. II w.e.f. 16.4.68.
Mrs. S. C. Whittle appointed Personal Secretary Grd. II w.e.f. 1.5.68.
Miss L. Clarke appointed Personal Secretary Grd. II w.e.f. 1.11.68.

Promotions: (other than Permanent Secretary and Director
of Medical Services)

Dr. S. P. N. Shongwe was promoted to Senior Medical Officer on 1.4.68.
Dr. T. G. Behan was promoted to Acting Senior Medical Officer on 1.4.68.
Dr. G. G. Murphy was promoted to Senior Medical Officer of Health on
1.4.68.
Mrs. S. M. Tshabalala was promoted to Radiographer w.e.f. 1.4.68.
Mrs. H. S. Ntsele was promoted to Radiographer w.e.f. 1.4.68.
Mrs. P. T. Mdiniso was promoted to Matron Grd. I w.e.f. 1.4.68.
Mrs. V. W. S. Mabuza was promoted to Matron Grd. II w.e.f. 1.4.68.
Mrs. E. Mtetwa was promoted to Matron Grd. II w.e.f. 1.4.68.
Mrs. M. B. Masipa was promoted to Matron Grd. II w.e.f. 1.4.68.
Mrs. M. Gininda was promoted to Nursing Sister w.e.f. 16.3.68.
Mr. W. Zwane was promoted to Assistant Accountant w.e.f. 1.10.68.
Mr. P. Mbamali was promoted to Assistant Accountant w.e.f. 1.5.68.

Courses:

Mrs. A. C. T. Mabuza, Matron Grd. I, Hospital Administration Course in
the U.K.
Mrs. M. B. Masipa, Matron Grd. II, Nursing Administration Course at
Baragwanath Hospital, Johannesburg.
Mrs. Agrineth Khanyile, Radiography Course in the U.K.

APPENDIX II.

RETURN OF CASES TREATED - GOVERNMENT AND MISSION HOSPITALS - 1968.

Detailed List No:	Group Causes.	Total Cases	Out- pat- ients	In- pat- ients	Deaths:
001-008	Tuberculosis, Respiratory System	1064	239	730	95
010	Tuberculosis of Meninges or C.N.S.	20	-	14	6
011	Tuberculosis of Intestines and Peritoneum	32	2	28	2
012-013	Tuberculosis of Bones and Joints	46	2	41	3
014-019	Tuberculosis - All other forms	184	58	114	12
020	Congenital Syphilis	86	78	7	1
021	Early Syphilis	270	264	6	-
024	Tabes Dorsalis	1	1	-	-
022-023)					
026-029)	All other Syphilis	236	209	26	1
030-035	Gonoccal Infection	1576	1555	21	-
036-039	Other Venereal Diseases	312	307	5	-
040-041	Enteric Fever	105	1	96	8
044	Brucellosis	3	2	1	-
045	Bacillary Dysentery	429	223	200	5
046	Amoebiasis	235	170	159	6
052	Erysipelas & Septicaemia	33	5	18	10
055	Diphtheria	7	-	5	2
056	Whooping Cough	1616	1297	310	9
057	Meningococcal Infections	7	2	4	1
060	Leprosy	6	2	4	-
061	Tetanus	58	1	34	23
080-083	Effects of Poliomyelitis	32	3	29	-
084	Smallpox (Variola Minor)	20	19	1	-
085	Measles	1533	879	634	20
092	Infectious Hepatitis	67	24	37	6
104	Tick-Bite Fever	11	8	3	-
116	Malaria	19	1	17	1
123-1	Bilharzia (Vesical)	654	600	54	-
123-0	Bilharzia (Intestinal)	20	6	14	-
126	Tape Worm	390	361	28	1
130-0	Ascariasis	952	920	31	1
124-128)					
130-1)	Other Helminthic Diseases	327	325	2	-
049	Poisoning - Food	34	-	32	2
087	Chicken Pox	238	204	34	-
131	Dermatophytosis	391	382	9	-
135	Scabies	757	749	8	-
137-138	Other Infective and Parasitic Diseases	32	23	9	-
140-150	Malignant Neoplasms of (a) Mouth, Pnarynx and Oesophagus	23	5	14	4
151-154	(b) Stomach, Intestine, Rectum	27	3	20	4
161-163	(c) Larynx, Trachea, Lung	15	2	9	4
170	(d) Breast	15	5	10	-
171	(e) Cervix Uteri	62	4	53	5
172	(f) Body of Uterus	10	3	6	1
177	(g) Prostate	4	-	4	-
191-9	(h) Skin	1	1	-	-
196-7	(i) Bone & Connective Tissue	14	-	11	3
199	(j) All Other Sites	39	1	29	9
204	Leukaemia	-	-	-	-

Benign/.....



Detailed List No.	Group Causes	Total Cases	Out- pat- ients	In- pat- ients	Deaths
210-239	Benign Neoplasms	173	78	94	1
250-251	Non-Toxic Goitre	84	71	13	-
252	Thyrotoxicosis	20	7	13	-
260	Diabetes Mellitus	93	41	49	3
281	Pellagra	836	743	81	12
282	Scurvy	4	-	4	-
286-6	Kwashiorkor	954	489	398	67
286-5-	Malnutrition unqualified	1077	981	361	35
290	Hyperchromic Anaemias	15	14	1	-
291	Hypochromic Anaemias	30	27	3	-
292-293	Anaemia, unspecified	135	97	37	1
241	Asthma	424	399	123	2
240,242)	Other Allergic Disorders	198	171	27	-
245)					
300-309	Psychoses	86	65	21	-
310,324)	Psychoneuroses & Hysteria	194	133	61	-
326)					
325	Mental Deficiency	83	38	44	1
330-334	Vascular Lesions of C.N.S.	30	9	16	5
340	Meningitis (Non-Meningococcal)	39	3	27	9
353	Epilepsy	171	120	48	3
370-379	Inflammatory Diseases of Eye	1186	1087	99	-
385	Cataract	47	22	25	-
387	Glaucoma	20	14	6	-
390	Otitis Externa	648	638	10	-
391-393	Otitis Media & Mastoiditis	1050	932	118	-
380-384	All other Diseases of Eye	405	320	84	1
341-344	All other Diseases of C.N.S. and Sense Organs	312	173	130	9
400-402	Rheumatic Fever	76	48	28	-
410-416	Chronic Rheumatic Heart Disease	73	35	37	1
420-422	Arterio- Sclerotic & Degenrative Heart Disease	305	206	69	30
430-434	Other Diseases of Heart	79	274	163	42
440-443	Hypertension & Heart Disease	101	73	20	8
444-447	Hypertension	451	379	72	-
450-456	Diseases of Arteries	62	51	9	2
460-468	Other Diseases of Circulatory System	356	253	92	11
470-475	Acute Upper Respiratory Tract Infections including Acute Tonsillitis	4189	3793	396	-
480-483	Influenza	2074	1778	294	2
490	Lobar Pneumonia	566	293	267	6
491	Broncho-Pneumonia	1745	1076	615	54
492-493	Atypical Pneumonia	229	57	157	15
500	Acute Bronchitis	2483	2291	187	5
501-502	Bronchitis, Chronic and Unspecified	964	762	196	6
512	Chronic Pharyngitis and Chronic Tonsillitis	482	422	60	-
518-521	Empyema & Lung Abscess	14	3	10	1
519	Pleurisy	194	158	34	2
523	Pneumoniasis	-	-	-	-
520-522	Other Respiratory Diseases	1596	1481	112	3
530	Dental Caries	4648	4587	61	-
531-535	All other diseases of Teeth and Gums.	1043	989	54	-
540	Gastric Ulcer	130	95	35	-
541	Duodenal Ulcer	42	18	22	2
543	Gastritis & Duodenitis	533	347	179	7
550-553	Appendicitis	165	75	88	2
570	Intestinal Obstruction	55	7	36	12
560	Hernia	99	33	62	1

Gastro-Enteritis/.....

Detailed List No.	Group Causes	Total Cases	Out- pat- ients	In- pat- ients	Deaths
570-0	Gastro-enteritis (4 weeks to 2 years)	4835	3816	927	92
570-1	Gastro-enteritis (over 2 years)	3954	3020	856	78
572	Chronic Enteritis & Colitis	279	244	34	1
581	Cirrhosis of Liver	203	84	106	13
584-585	Cholecystitis	50	39	11	-
536-539)					
544-573)					
580-582)	Other Diseases of Digestive				
583-586)	System	2279	2013	256	10
587)					
590	Acute Nephritis	84	54	29	1
591-594	Chronic Nephritis	94	59	31	4
600	Infections of Kidney	237	138	95	4
602,604	Calculi of Urinary System	17	8	9	-
610	Hyperplasia of Prostate	21	14	7	-
620,621	Diseases of Breast	93	70	23	-
613	Hydrocele	103	56	47	-
634	Disorders of Menstruation	1332	1108	224	-
601,603)					
605,609)	All other Diseases				
611,612)	of				
614-617)	Genito-Urinary System	6713	5722	984	7
622-633)					
660	Normal Deliveries	3591	-	3591	-
671)					
673-678)	Deliveries with Complications	541	-	533	8
640,641)	Sepsis of Pregnancy				
681,682)	Childbirth and Puerperium	40	20	19	1
684)					
642	Toxaemia of Pregnancy	23	7	15	1
643,644)	Haemorrhage of Pregnancy				
670,672)	and Childbirth	32	1	31	-
650	Abortion	597	186	410	1
651	Abortion with Sepsis	63	10	53	-
690-698	Infections of Skin and				
	Subcutaneous Tissues	2876	2320	556	-
720-727	Arthritis & Spondylitis	266	209	57	-
726,727	Muscular Rheumatism and				
	Rheumatism unqualified	1529	1473	56	-
730	Osteomyelitis & Periostitis	85	33	52	-
737,745)	Ankylosis and acquired				
749)	Musculo-skeletal Deformity	58	40	18	-
700-714	All other Diseases of Skin	726	652	73	1
731-736	All other Diseases of				
	Musculo-Skeletal System	204	157	42	5
750-759	Congenital Malformations	110	49	59	2
760-762	Birth Injuries	11	-	7	4
765	Opthalmia Neonatorum	13	6	6	1
770	Haemolytic Disease (NeoNatal)	18	12	4	2
773-776	Other Diseases Early Infancy	455	221	176	58
791	Senility	62	60	2	-
788-9	P.U.O.	829	591	226	12
788-1-)					
788-7)	All other Ill-defined				
788-9)	Causes of Morbidity	425	243	171	11
789-792)					
795)					
993	Observation without need for further care	317	-	317	-

"E" CODE ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONING AND VIOLENCE (EXTERNAL CAUSE).

Detailed List No.		Total Cases	Out- pat- ients	In- pat- ients	D
E810-E835	Motor Vehicle Accidents	879	442	412	
E800-E802	Other Transport Accidents	241	88	149	
E870-E895	Accidental Poisoning	234	92	120	
E900-E904	Accidental Falls	1476	927	544	
E612	Accidents Caused by Machinery	198	152	45	
E916	Accidents caused by Fire	325	185	132	
E917, E918	Accidents caused by Hot substances and corrosives	297	226	68	
E919	Accidents caused by Firearms	36	17	19	
E910-E913) E915, E920) E928, E930) E965)	All other accidental causes	3185	2242	930	
E970- E979	Suicide and Self-Inflicted Injury	23	2	20	
E980-E985	Assault, Homicide	1765	730	1016	

"N" CODE ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONING AND VIOLENCE (NATURE OF INJURY).

N800-N804	Fracture of Skull	176	9	150	
N805-N809	Fracture of Spine and Trunk	106	18	84	
N810-N829	Fracture of Limbs	980	296	680	
N830-N839	Dislocation	143	58	85	
N840-N848	Sprains and Strains	601	509	92	
N850-N856	Head Injury (excluding Fracture)	483	232	237	
N860-N869	Internal Injury, Chest, Abdomen and Pelvis	77	-	62	
N870-N908	Laceration & Open Wounds	2976	1785	1185	
N910-N929	Superficial Injury -- Contusion	1093	709	384	
N930-N936	Foreign Body entering through Orifice	115	60	55	
N940-N949	Burns	519	303	205	
N960-N979	Effects of Poison	193	30	157	
N950-N959)	All other effects of				
N980-N999)	External Causes	85	18	61	

Detailed/.....

Detailed List No.	Group Causes	Total Cases	Out- pat- ients	In- pat- ients	Deaths.
Y00	Medical Examinations, Boards and Tax Exemption Examinations	3290	3290	-	-
Y02	Prophylactic Injections:				
	a) Smallpox Vaccination	3231	3231	-	-
	b) T.A.B.	13	13	-	-
	c) Diphtheria	8	8	-	-
	d) Diphtheria and Whooping Cough	85	85	-	-
	e) Diphtheria, Whooping Cough and Tetanus	235	235	-	-
	f) Tetanus	131	131	-	-
	g) Poliomyelitis	10	10	-	-
	h) Yellow Fever	223	223	-	-
	i) Cholera	-	-	-	-
Y06	Ante-Natal Examinations	5350	5350	-	-
Y08	Attendants admitted as In-Patients with sick Children	1918	-	1918	-
TOTAL "NEW" PATIENTS		99967			

SUBSEQUENT ATTENDANCES:

Subsequent Ante-Natal Attendances	2820
Subsequent Prophylactic Injections	1709
All other Subsequent Attendances	<u>47238</u>
GRAND TOTAL SUBSEQUENT ATTENDANCES	<u><u>51867</u></u>

